

AMENDMENTS TO THE CLAIMS

1. (Original) A method comprising:
 - determining a first integration time for a first color channel;
 - determining a second integration time for a second color channel, where the second integration time is shorter than the first integration time;
 - dividing the second integration time into a set of integration times;
 - integrating a first sensor over the first integration time; and,
 - integrating a second sensor over the set of integration times.
2. (Original) The method of claim 1, where dividing the second integration time into the set of integration times includes dividing the second integration time by a predetermined number to generate the set of integration times, where a sum of all integration times in the set of integration time equals the second integration time.
3. (Original) The method of claim 1, where integrating the second sensor over the set of integration times includes integrating the second sensor over each of the set of integration times.
4. (Original) The method of claim 3, where integrating the second sensor over each of the set of integration times includes generating a set of sample signals to the second sensor, where each sample signal in the set of sample signals corresponds to a respective integration time in the set of integration times.
5. (Original) The method of claim 1, where the set of integration times are dispersed throughout the first integration time.
6. (Original) An article comprising a computer readable medium having instructions stored thereon, which when executed, causes:
 - determination of a first integration time for a first color channel;
 - determination of a second integration time for a second color channel, where the second integration time is shorter than the first integration time;
 - division of the second integration time into a set of integration times;

integration of a first sensor over the first integration time; and,
integration of a second sensor over the set of integration times.

7. (Original) The article of claim 6, where division of the second integration time into the set of integration times includes division of the second integration time by a predetermined number to generate the set of integration times, where a sum of all integration times in the set of integration time equals the second integration time.
8. (Original) The article of claim 6, where integration of the second sensor over the set of integration times includes integration of the second sensor over each of the set of integration times.
9. (Original) The article of claim 8, where integration of the second sensor over each of the set of integration times includes generation of a set of sample signals to the second sensor, where each sample signal in the set of sample signals corresponds to a respective integration time in the set of integration times.
10. (Original) The article of claim 6, where the set of integration times are dispersed throughout the first integration time.
11. (Currently Amended) An apparatus comprising:
an image sensor having a first sensor for a first color channel and a second sensor for a second color channel; and,
an control unit coupled to the image sensor, the control unit having:
a integration time generation unit;
a first color channel pulse generation unit coupled to the first sensor;
a first duty cycle register coupled to the first color channel pulse generation unit;
a second color channel pulse generation unit coupled to the second sensor;
and,
a second duty cycle register coupled to the second color channel pulse generation unit;
where the first color channel pulse generation unit generates a set of sample signals to the first sensor based on a value contained in the first duty cycle register wherein the

sample signals represent a first shutter control pulse width for the first color channel being split into a plurality of sub-pulses whose sum width equals the first pulse width.

12. (Currently Amended) The apparatus of claim 11, where the second color channel pulse generation unit generates a second set of sample signals to the second sensor based on a second value contained in the second duty cycle register wherein the second set of sample signals represent a second shutter control pulse width for the second color channel being split into a plurality of sub-pulses whose sum width equals the second pulse width.

13. (Original) The apparatus of claim 11, where the set of sample signals are a set of pulses having a duty cycle based on the value contained in the first duty cycle register.

14. (Original) The apparatus of claim 11, further comprising a signal processing unit coupled to the first image sensor to receive an output.

15. (Original) The apparatus of claim 14, where the signal processing unit receives a set of sampled signals from the first sensor based on the set of sample signals and is configured to combine the set of sampled signals into a single output..